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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/839,300	04/23/2001	Yuefeng Liu	6502.0333	3107

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SUN MICROSYSTEMS/FINNEGAN, HENDERSON LLP  
901 NEW YORK AVENUE, NW  
WASHINGTON, DC 20001-4413

EXAMINER
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NGUYEN, PHUONGCHAU BA

ART UNIT	PAPER NUMBER
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2616

MAIL DATE	DELIVERY MODE
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01/02/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/839,300	LIU, YUEFENG
Examiner	Art Unit	
Phuongchau Ba Nguyen	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 10-20-7.

2a)  This action is **FINAL**.                    2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 1-37 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) 1-16 and 37 is/are allowed.

6)  Claim(s) 27-36 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 9-27-07.  
4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_.

***Claim Rejections – 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 27–36 are rejected under 35 U.S.C. 103(a) as being unpatentable by Kompella (7,136,374) in view of Moura (5,818,845).

Regarding claims 27 and 32,

Kompella discloses transport networks supporting virtual private networks, and configuring such networks. Kompella discloses *a method for communicating between a first private network* (network at site 0–fig.2) *and a second private network* (network at site 3–fig.2) *configured from nodes* (CE<sub>0</sub>–CE<sub>5</sub>, fig.2, see col.7, lines 9–28 wherein the CEs to be identified with a VPN to which they belong; and col.8, lines 30–32 wherein the transport network

supports a separate VPN for each of the customers) *in a public network*

*infrastructure* (transport network 210-fig.2), *comprising*:

*means for receiving a non-tunneled packet from a source node (CE<sub>0</sub>) in the first private network* (site 0), see column 7, lines 2-10;

*means for determining whether the packet (from CE<sub>0</sub>) is destined for the second private network* (CE<sub>5</sub> at site 5, col.7, lines 25-28 & col.8, lines 30-32), see column 7, lines 29-56;

(1) *means for obtaining an address mapping corresponding to the destination node* (inner label associated with the destination customer edge device C<sub>5</sub>, col.7, lines 40-56 & col.8, lines 2-32) *and acquiring a channel key* (channel identifier, col.7, lines 44-49) *associated with a channel based on the determination*, see figs. 2-5, 9-10, 17-18.

(2) *means for sending the packet over a channel* (LSP-label switched path, fig.6) *to the destination node using the address mapping, the address mapping reflecting a relationship between (a) an internal address for the destination*

*node for use in communicating among nodes in the second private network*  
(inner label, 840–fig.8) *and (b) an external address* (outer label, 830–fig.8) *for*  
*the destination node suitable for communicating over the public network*  
*infrastructure* (transport network–MPLS).

Kompella further discloses in column 7, lines 25–28 that the present invention may do so by permitting different customer edge devices (CEs) to be identified with a VPN to which they belong, and to uniquely within a VPN, address, such as CEs.

Kompella discloses all the claimed limitations, except (1) wherein the channel key expires after a predetermined amount of time.

However, in the same field of endeavor, discloses Moura (5,818,845) discloses providing an interactive network sessions in upstream and downstream communication channels, see col.17, lines 3–6, corresponding to (1). Therefore, it would have been obvious to an artisan to apply Moura's teaching to Kompella's teaching to effectively utilize the bandwidth in transmission.

Regarding claims 28 and 33, Kompella further discloses when the data packet sending from an end-station CE<sub>0</sub> to CE<sub>5</sub>-fig.2, the packet is encapsulated with the inner label for transmission to a destination node CE<sub>5</sub> in the transport network, see 440-450, fig.4, (corresponding to *means for adding the external address to the packet*)

Regarding claims 29 and 34, Kompella discloses all the claimed limitations, except (1) *encrypting the packet*.

However, in the same field of endeavor, Howe (US 2005/0094640) discloses encrypting key to all data in transit, see 0009 (corresponding to (1)). Therefore, it would have been obvious to an artisan to apply Howe's teaching to Kompella's system with the motivation being to provide secured data being accessed with authorization.

Regarding claims 30 and 35, Kompella further discloses forwarding tables 340–fig.3 for mapping the destination of packet of the first customer edge device of a VPN network to the destination customer edge device of another VPN network, see also figs.4–5 and fig.7, col.11, lines 35–48 (corresponding to *(means for accessing the address mapping based on a determination that the packet is destined for the second private network.)*).

Regarding claims 31 and 36, Kompella further discloses in fig.7, col.11, lines 35–48 for looking up for a match of input port number and the outer label corresponding to “*determining whether an address mapping exists for a destination address in the packet*”.

#### *Allowable Subject Matter*

3. Claims 1–16, 37 allowed over the prior art.

*Response to Arguments*

4. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuongchau Ba Nguyen whose telephone number is 571-272-3148. The examiner can normally be reached on Monday-Friday from 10:00 a.m. to 6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on 571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit: 2616

*PChau*  
Phuongchau Ba Nguyen  
Examiner  
Art Unit 2616

*Huy D. Vu*

**HUY D. VU**  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600